UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

September 17, 2009

Steve Ellis
Forest Supervisor
Wallowa-Whitman National Forest
P.O. Box 907
Baker City, Oregon 97814

RE: U.S. Environmental Protection Agency (EPA) review and comments for the Wallowa Whitman National Forest (WWNF) Travel Management Plan (TMP) Draft Environmental Impact Statement (EIS). EPA Project Number: 07-017-AFS

Dear Mr. Ellis:

This review was conducted in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Under our policies and procedures, we evaluate the environmental impact of the proposed action and the adequacy of the impact statement. We have serious concerns about potential impact of the proposed TMP on water quality and have therefore assigned an Environmental Concerns – Insufficient Information (EC-2) rating to the EIS based on Alternative 2. Other alternatives have the potential for substantially greater adverse impacts to water quality. A copy of the EPA rating system is enclosed.

EPA acknowledges that the TMP process is a positive step in addressing resource impacts from motorized uses. The permanent prohibition of cross country travel and the switch from unmanaged to managed motorized recreational use will likely contribute to the achievement of significant environmental benefits.

We disagree with the DEIS's general conclusion that all alternatives are consistent with Clean Water Act requirements. Our primary related recommendation is to develop and incorporate water quality emphasis elements into an existing alternative or develop a new alternative that does so. Secondary recommendations relate to Implementation and Administration, Minimum System Designation, Unauthorized Routes, Dispersed Camping, and, Climate Change. All of our recommendations are detailed in the attached comments.

If you have any questions or concerns please contact Erik Peterson of my staff at (206) 553-6382 or by electronic mail at peterson.erik@epa.gov.

Sincerely,

/s/
Christine Reichgott, Manager
Environmental Review and Sediment Management Unit

Enclosures:
EPA Region 10 Detailed Comments for the Wallowa Whitman National Forest Travel Management Plan Draft Environmental Impact Statement
EPA Rating System for Draft Environmental Impact Statements

EPA REGION 10 DETAILED COMMENTS FOR THE WALLOWA WHITMAN NATIONAL FOREST TRAVEL MANAGEMENT PLAN DRAFT ENVIRONMENTAL IMPACT STATEMENT

Water Quality, Fisheries, Riparian Habitat and Soils

Clean Water Act Requirements

We are concerned that none of the alternatives, as presented, appear to comply with all Clean Water Act (CWA) requirements. The alternatives would provide for the designation of routes which would:

- "…lead to continued sediment delivery from the routes directly impacting fish and fish habitat as well as water quality parameters for suspended sediment and turbidity."(Alternative 3) and "…would have the same relative direct effect as the existing condition on fisheries and watershed resources." (Alternative 4, p. 209),
- lead to road densities which exceed Forest Plan Standards and Guidelines (Table G18), and,
- have prohibitively high maintenance costs resulting in problems from water diversion features that fail to protect resources. (p. 128)

Recommendation:

We recommend that the Forest incorporate water quality emphasis elements into the selected alternative or develop a water quality emphasis alternative. See our water quality related recommendations below for further explanation of our perspective on Clean Water Act requirements, including TMDL, WQMP, 303(d) listings, and antidegradation provisions. Our substantive recommendations are summarized below.

- Open only those routes which are consistent with WWNF forest plan S&Gs and BMPs.
- Reduce road densities to < 1 mile/sq mi for watersheds with bull trout-bearing streams and to < 2 mi/sq mi for watersheds with salmon-bearing streams;
- Consider motorized recreational use only in those areas that are not contributing to present water quality impairments or degradation to high quality waters, e.g., no designation of routes with high or extreme soil or water risks.
- Incorporate special protections for high quality resources – for example, for the John Day River, which, "…contains some of the most productive anadromous fish populations and habitat in the project area." (p. 202)
- Consider proven protective season of use periods and wet weather closures, including the prohibition of motorized vehicle use over part mud and part snow.

Demonstrating Consistency with CWA Requirements

In addition to our above environmental concerns with the alternatives presented, we also have analytical concerns with the Water Quality, Fisheries, Riparian Habitat, and Soils section of the DEIS. The DEIS provides insufficient information to support the conclusion that the alternatives would comply with Clean Water Act requirements.

Load Allocations

We do not believe that the DEIS provides a sufficient information on how the designation of dense route networks, thousands of stream crossings, and hundreds of miles of routes in

RHCAs will meet, for instance, specified loads and surrogate measures associated with project area TMDLs.

As noted in the Upper Grande Ronde (UGR) Total Maximum Daily Load (TMDL), almost 46% of the land in the UGR Subbasin is managed by the USFS. In order to protect and improve water quality we believe it is critical that the USFS take measures to protect unimpaired waters, address pollutant sources, and improve water quality in impaired reaches. The UGR TMDL addresses several pollutants applicable to this TMP action: notably temperature, dissolved oxygen (DO), pH and sedimentation. For temperature, the TMDL set a 0% load allocation to forestry land use and set surrogate measures of site potential effective shade levels, channel width reductions, sinuosity enhancements, and instream flow improvements to bring the area into compliance with temperature standards. For DO and pH, the TMDL set 20-50% nutrient load reductions for various reaches on the national forest, noting however that DO and pH will be met for most areas if site potential effective shade levels are met, but some areas will still need additional nutrient reductions (including for sediment-associated nutrients) over and above attainment of effective shade levels.

Contrary to what is presented in the DEIS on page 195, the UGR TMDL established a loading capacity target for sedimentation at 20% streambed area fines. As was done for temperature, the UGR TMDL set surrogate measures of improved riparian conditions, stream narrowing, increased sinuosity, and decreased wetted width to depth ratio. These surrogate measures aim toward improvements in streambank stability, reduced erosion, decreased flow velocities, and improved pool development and maintenance. We are concerned that the designation of dense route networks, thousands of stream crossings, and hundreds of miles of routes in RHCAs may not meet the above surrogate measures associated with project area TMDLs.

Standards and Guidelines and Best Management Practices

Meeting S&Gs and BMPs is an important aspect of achieving consistency with CWA requirements. The Water Quality Management Plan (WQMP) developed for the UGR TMDL stipulates that WWNF forest activities follow USFS S&Gs and federal and state BMPs such as those in the implementation plan under CWA Section 208. Many of the WQMP S&Gs and BMPs are relevant for all portions of the forest.

Some key water quality S&Gs specified in the WQMP indicate that:

- existing or planned roads must meet riparian management objectives by minimizing road locations in RHCAs;
- the development and implementation of a Road Management Plan or a Transportation Management Plan be initiated, which at a minimum addresses items such as avoiding sediment delivery, avoiding disruption of natural flow paths, and regulating traffic during wet periods to minimize erosion;
- determining the influence of each road on the resource management objectives;
- operating and maintaining roads and trails of the forest transportation system based on resource objectives and intended uses;
- improving existing culverts, bridges, and other stream crossings to accommodate a 100-year flood;

- providing and maintaining fish passage; and,
- closing, stabilizing and/or obliterating roads not needed for future management.

This DEIS does not explicitly link how the route network proposed in each of the alternatives will meet these S&Gs.

Site Specific Analyses

We recognize that the potential environmental impacts of roads and trails vary according to the routes' design, condition, use and location. Stream crossings with inadequate culverts, for instance, are more likely than well designed bridges to increase sediment input to streams. A road's maintenance level may also influence the hazard they pose to water quality. We are concerned, therefore, that the DEIS does not indicate which roads have inadequate stream crossings and/or drainage structures to prevent sedimentation.

Water Quality Restoration Plans

According to NFS 02-MU-11060000-141, "Memorandum of Understanding between USDA Forest Service and Oregon Department of Environmental Quality to Meet State and Federal Water Quality Rules and Regulations," the USFS committed to prepare Water Quality Restoration Plans to address both 303(d) listed impairments within the national forest and TMDL requirements for national forest lands. Though the Upper Grande Ronde (UGR) TMDL was finalized in 2000 and streams within the WWNF have been on the 303(d) list for years, the DEIS does not mention or describe USFS Water Quality Restoration Plans.

Recommendations:

To address all of our above described concerns we recommend the FEIS include the following:

Disclose which specific roads and trails are either contributing to, or are expected to contribute to, water quality problems. An effective disclosure tool may include a table which differentiates (i) stream crossings by type and condition, (ii) roads' relative susceptibility to erosion, (iii) present condition of road maintenance, etc.

Develop and include a comparative summary of the proposed alternatives' consistency with key water quality related S&Gs and BMPs. This summary should include additional supporting information for conclusions such as, "Alternatives 2, 5 and 6 provide relatively equal reductions in designated motor vehicle routes in RHCAs and in the direct effects on fisheries and watershed resources."(p. 209). Additional information is needed to explain how Alternative 5's additional 1,100 stream crossings and 130 miles of routes in RHCAs provides "relatively equal reductions" in effects on fisheries and watershed resources as Alternative 6.

Compare each alternative's likely contribution to long-term processes and trends towards consistency with Forest Plan S&Gs. We note that the decisions upon which Alternative 2 is based, "established the existing desired open/closed transportation system within the project area to meet or trend toward the forest plan standards and guidelines and provide for resource protection." (p. 67). How do alternatives 3, 4 5, and 6 continue

trend the WWNF toward the forest plan S&Gs upon which CWA requirements depend? Please specifically address the effect of designating ML 1 roads on the

WWNF's trend toward forest plan S&Gs, including the low level of maintenance for ML 1 roads.

Provide additional information on how each of the proposed alternatives will meet the S&Gs and BMPs which are particularly relevant for CWA consistency (e.g., those that are required by the UGR WQMP and likely to be similarly needed for 303(d) listed waters). For example, please summarize the relative likelihood for each of the proposed alternatives to maximize consistency with the BMPs from pages 44-46 of Appendix G. Consider especially, Soil Management (d) and Roads/ Engineering (g), (j), (k), (o), (p), (r), (t), (hh), (kk).

We recommend that the FEIS interpret the above, and other similar, BMPs from a travel management planning perspective. For example, (o) states that, "Within RHCAs, existing roads which meet all of the criteria found on page 47 of the Best Management Practices (Wallowa – Whitman National Forest) should have surface cross-drains installed before the timber sale is finished." We believe that this, and other similar BMPs, should be interpreted to imply that the motorized route ought to be closed to motorized recreation unless and until the BMP has been successfully implemented.

Discuss the link between S&Gs and BMPs and water quality benefits. How will the designation of road densities exceeding 1 mile per square mile in most of the bull trout watersheds and densities exceeding 2 miles per square mile in several of the salmon watersheds affect the Forest's efforts to increase anadromous and resident fish populations (See page 191)? Alternatives 3 and 4 appear to be especially inconsistent with this Forest Plan desired condition. Table 117 states that they are "Likely to Adversely Affect" threatened Snake River Spring Chinook, Snake River Steelhead and Columbia Bull Trout populations.

How will the designation of hundreds of miles of roads in RHCAs and thousands of stream crossings allow attainment of Riparian Management Objectives (RMO) (p. 191)?

Expand the section, "Cumulative Effects on Water Quality, Fisheries, Riparian Habitat, and Soils Resources" (p. 211) to include the exacerbating effects of climate change, road maintenance backlogs, and invasive species. These reasonably foreseeable events add further support for the selection of a water quality protective alternative.

Update Table 54 with data from the Oregon State Final Integrated Report 2004/2006 (303(d) List and 305(b) Report).

Safe Drinking Water

The DEIS notes that numerous private and community water supplies are dependent on waters originating on the WWNF. Roads and the access they provide can impact drinking water

supplies, not only by the sediment produced, but also by numerous vehicle-associated contaminants and impacts to water flows from compaction and road cuts.

Recommendation:

We recommend that the USFS assess which routes have the potential to impact drinking water supplies and reduce the route network accordingly to protect these supplies.

Implementation and Administration

We strongly agree with the DEIS's conclusion that, "The rule (*Travel Management Rule*) provides better opportunities for sustainable motor vehicle recreation, better protection of the environment, increased public safety, and ample high-quality access to National Forest System (NFS) lands." We recognize that ensuring opportunities for sustainable motorized recreation and environmental protection are realized can be as much a function of the effective implementation and administration of the MVUM as it is a function of the specific combination of designated routes. Based on our review of this and other Travel Management Plans we are providing the following list of recommendations to supplement your already noteworthy Implementation and Administration planning.

Recommendations*[1]*:

We recommend the consideration of the following suggestions for the implementation and administration plan of the FEIS's preferred alternative.

- Extend the Water Quality, Fisheries, Riparian Habitat, and Soils monitoring plan beyond 3 years and include headwaters and wetlands in addition to perennial fish bearing streams.
- Incorporate Alternative 5's implementation elements as described on page 13 into all alternatives.
- Simplify closure periods and areas as developed for Alternative 5 for all alternatives.
- Consider special signage about the environmental impacts of firewood gathering in snag habitat.
- Develop supplementary navigational maps in conjunction with the MVUM (E.g., Fishlake National Forest in Utah has been noted for its color maps).
- Identify likely problem areas for compliance and enforcement (e.g., traditional dispersed camping areas proposed to be closed).
- Develop partnerships to leverage resources. See "The National Assessment of Travel Management Planning" (footnote 1) for:
    - "Example Charter (Protocols and Ground Rules) for Collaborative Stakeholder Involvement." (p. 79)
    - "Example of Volunteer Recruitment (Building Partnerships)" (p. 76)
    - "Example of User Education: Sharing Resources" (p. 84)
- Consider accepting technical assistance from credible stakeholders.
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[1] Many of these recommendations have been take directly from the 5/20/2009 report, "National Assessment of Travel Management Planning: Challenges, Recommendations, and Best Practices for Public Involvement" (http://www.ecr.gov/pdf/NationalAssessmentOfTmp-FullDocument.pdf).

- Improve enforcement through collaboration. See, for example, http://www.idaho-ohv.org to learn more about the Idaho Off-Highway (OHV) Public Information Project.
- Prioritize OHV's contribution to the sedimentation of streams within the implementation and adaptive management planning framework. Providing a

management trigger related to water quality standards for sediment may be a useful method for ensuring benefits to the aquatic environment are realized.

Minimum System Determination

According to the DEIS, "The Travel Management Rule for motor vehicle management (Travel Management Rule, 36 CFR 212.1) requires all national forests to complete a comprehensive evaluation of travel management, such as this DEIS, to propose limits on motor vehicle use off of designated routes and outside of designated areas." (p. 59). We commend the Forest for the comprehensive evaluation of travel management that is represented in the DEIS. It is unclear, however, whether or not this comprehensive evaluation represents compliance with all aspects of the Travel Management Rule. In particular, we are interested in how the DEIS's comprehensive evaluation relates to the Rule's requirement to use a science based analysis to determine the minimum system (36 CFR 212.5 (b) (1)).

The Conference Report for the Omnibus Appropriations Act of 2009 states,

> The Committees on Appropriations expect that each individual National Forest or Grassland will comply fully with all travel management regulatory requirements, particularly the science-based analysis in 36 CFR 212.5 (b)(1), the identification of unneeded roads in 36 CFR 212.5(b)(2), and the criteria for designation in 36 CFR 212.55(a) and (b). The Committees expect the Forest Service to identify priorities, and associated resource requirements, to fully comply with the regulatory requirements of 36 CFR 212.5(b) (1) and (2).[2]

We realize that funding and time constraints dictate much of the travel management process and we commend the Forest for moving forward on the designation of routes. Simultaneously, we believe that incorporating a science-based analysis to identify the minimum system is an important part ensuring long term sustainability for recreation opportunities and resource protection.

Recommendation

We recommend that the FEIS disclose how the TMP has or has not complied with 36 CFR 212.5(b) (1) and (2). If the WWNF intends to comply with 36 CFR 212.5(b) (1) and (2) at a later date we recommend that the FEIS describe this phased approach.

Unauthorized Routes

[2] See H.R. 1105 – Omnibus Appropriations Act, 2009 Conference Report, Division E – Department of the Interior, Environment, and Related Agencies, Page 1146, March 11, 2009 at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111_cong_house_committee_prints&docid=f:47494e.pdf

We understand that logical connections within the route system are an important aspect of increasing compliance. We also respect the need to analyze unauthorized routes on a site specific basis due to this TMP's time constraints. Importantly, though, we reiterate the DEIS's conclusion that unauthorized routes were, "...generally developed without agency authorization, environmental analysis, or public involvement..." (p. 54). Without appropriate environmental analyses and BMPs, unauthorized routes have a higher potential for adverse impacts to water quality, public safety and natural resources.

Recommendation:

Consistent with the Conference Report for the Omnibus Appropriations Act 2009, we recommend that the decommissioning of unauthorized roads not part of the official transportation system be expedited in response to threats to public safety, water quality, or natural resources.[3] Please summarize the likely prioritization and decommissioning process that ranger districts on the WWNF will follow to expedite the decommissioning of unauthorized routes. Disclosure of this process and implementation goals will decrease uncertainty associated with the environmental risk of the forest's substantial unauthorized route network.

Dispersed Camping

Motorized access to dispersed recreation has the potential to cause relatively high and concentrated adverse environmental impacts. Impacts are often concentrated around streams, lakes and other areas of special interest for forest users.

Recommendation

EPA prefers designated motorized routes and areas for dispersed recreation over corridors. We believe designated routes and areas, if adequately signed, have a higher likelihood of meeting environmental standards and protecting natural resources.

If or where corridors to dispersed camping are allowed, we recommend restrictions for motorized access around waterbodies. These restrictions should be designed to minimize adverse impacts to native vegetation, compaction of soils and direct access to the edges of waterbodies. Denuding native vegetation, compacting soils and accessing waterbody edges with motorized vehicles increase potential sediment delivery to streams and disrupts riparian and floodplain functions.

Climate Change

We concur that the impacts of this project on climate change would be very difficult to calculate and beyond the resources for this TMP. We are concerned, however, that the

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[3] H.R. 1105 – Omnibus Appropriations Act, 2009 Conference Report, Division E – Department of the Interior, Environment, and Related Agencies, Page 1146, March 11, 2009.

reasonably foreseeable impacts of climate change on the project area are not addressed. We support incorporating climate change adaptation into the project's decision making process.

In relationship to aquatic resources consider, for example, the summary of effects compiled in the 2008 Aquatic Resources Conservation Strategy (ARCS) for Region 6. The ARCS notes the climate change impacts as identified by the Interagency Scientific Advisory Board review and other sources,

> [I]n coming years and decades: (1) higher temperatures will result in more precipitation falling as rain rather than snow; (2) snowpacks will diminish and seasonal stream flow patterns will be altered; (3) peak river flows will likely increase; (4) summer low flows will be lower; and (5) water temperatures will continue to rise. Not all of these anticipated trends are necessarily harmful to aquatic habitats, and many are dwarfed by other anthropogenic factors, but they have major implications for native fishes and aquatic ecosystems. . . . Existing well-connected, high-elevation habitats on public lands will be important to supporting salmon survival and recovery as the climate continues to warm (Martin and Glick 2008).

Though the ARCS was designed for use during Forest Plan revisions, the strategy includes numerous adaptation actions that would be useful to adopt in this present TMP process. These actions include maintaining instream flows by limiting water withdrawals, reducing flood peaks by enhancing floodplain connectivity and disconnecting roads from streams, reconnecting isolated habitats by removing anthropogenic barriers, managing riparian forests to provide shade and other functions, and improving waters where aquatic habitats and water quality have been degraded.

The ARCS goes on to state, "Actual impacts to aquatic ecosystems will be highly dependent on the degree to which adaptation actions are implemented now and in the future. Without them, aquatic habitats are likely to become increasingly isolated, simplified, and less likely to recover after significant disturbance events."

Recommendations:

Because many anticipated climate change impacts will exacerbate the current effect of motorized routes on water quality and fisheries we recommend the consideration of adaptive measures in all relevant USFS processes. We believe a discussion in the FEIS of likely climate change impacts on the WWNF will help to disclose how route designation decisions contribute to the Forest's long term climate change adaptation strategy. Of particular interest are the potential cumulative impacts of climate change on the connectivity of wildlife and hydrology (including shallow groundwater contributions to surface waters), threatened and endangered species habitat, fire management, and invasive species management.

Suggested Climate Change References

EPA understands that many questions surrounding climate change remain unanswered, including what effects climate change might have on the resources impacted

by travel management planning. We believe the following resources, and especially those from the USFS's Climate Change Resource Center, may prove useful as background for any climate change impacts and adaptation discussion.

Botkin, D.B. et al., 2007. Forecasting the effects of global warming on biodiversity. Bioscience 57, 227–236.

Grace, J., Berninger, F., Nagy, L., 2002. Impacts of climate change on the tree line. Annals of Botany 90, 537–544.

Morin, X., Thuiller, W. 2009. Comparing niche- and process-based models to reduce prediction uncertainty in species range shifts under climate change. Ecology, 90(5), 1301-1313

Opdam, P., Wascher, D., 2004. Climate change meets habitat fragmentation: linking landscapes and biogeographical scale levels in research and conservation. Biological Conservation 117, 285–297.

Peterson, David L., McKenzie, Don. 2008. Wildland Fire and Climate Change. (May 20, 2008). U.S. Department of Agriculture, Forest Service, Climate Change Resource Center. http://www.fs.fed.us/ccrc/topics/wildland-fire.shtml

Ruggiero, Len; McKelvey, Kevin; Squires, John; Block, William. 2008. Wildlife and Climate Change. (May 20, 2008). U.S. Department of Agriculture, Forest Service, Climate Change Resource Center. http://www.fs.fed.us/ccrc/topics/wildlife.shtml

SAP 4.4. Adaptation Options for Climate-Sensitive Ecosystems and Resources | National Forests. http://www.climatescience.gov/Library/sap/sap4-4/final-report/sap4-4-final-report-Ch3-Forests.pdf.

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements Definitions and Follow-Up Action*

Environmental Impact of the Action

LO – Lack of Objections

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC – Environmental Concerns

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO – Environmental Objections

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU – Environmentally Unsatisfactory

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 – Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 – Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 – Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987